Hazardous Waste Generator Requirements

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Division of Waste Management

Solid Waste

Hazardous Waste

Underground Storage Tanks

• TSCA (PCB's)



Solid Waste

- Landfills
- Transfer Stations
- Convenience Centers
- Recycling Centers
- Landfarms
- Beneficial Reuse Facilities
- Waste Tire Facilities
- Open Dumps



Hazardous Waste

Hazardous Waste Generators

Hazardous Waste Transporters

• Treatment, Storage, Disposal Facilities



Underground Storage Tanks

Tank Removals

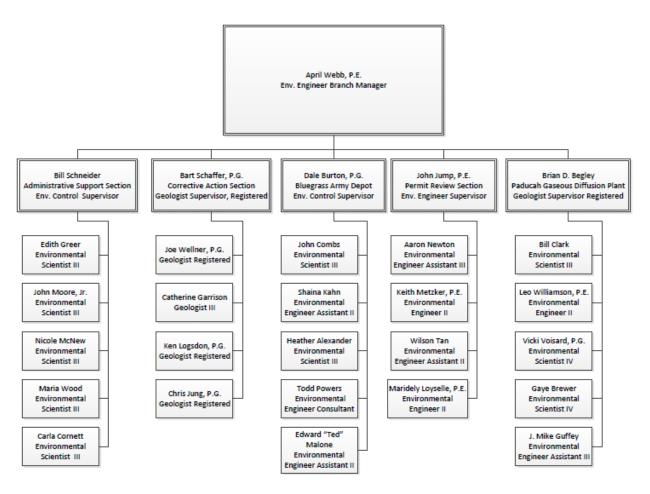
Tank Installations

• Technical Compliance Inspections



Hazardous Waste Branch

Hazardous Waste Branch





Types of Hazardous Waste

- Declared hazardous wastes.
- Characteristic hazardous wastes.
- Listed hazardous wastes.
- Mixtures of hazardous waste with solid waste.



Waste Determinations

Ask the four questions:

- Is it a solid waste?
- Is it exempt?
- Is it listed?
- Is it characteristic?



Is the material abandoned by being:

- Thrown away;
- Burned or incinerated;
- Accumulated, stored, or treated before, or in lieu of, being thrown away, burned, or incinerated?



Is the material a spent material, sludge, byproduct, or scrap metal, or a commercial chemical product, and is being recycled by being:

- Used in a manner constituting disposal,
- Burned for energy recovery or used to produce a fuel,
- Reclaimed, or
- Speculatively accumulated?



Is the material inherently waste-like because it is:

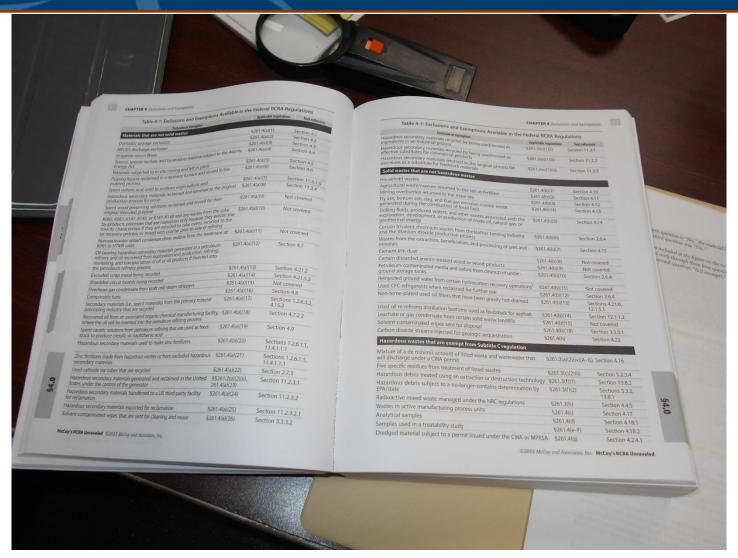
- A dioxin waste being recycled, or
- A secondary material fed into a halogen-acid furnace?



If the material is NOT a solid waste, then it can't be a hazardous waste!!!



Is it exempt?





Is it exempt?

Places to check for exemptions and exclusions:

- §261.4(a)
- §261.2(e)
- §261.4(b)
- §261.3
- §261.6(a)
- §261.7
- §261.8
- §261.9



Is it listed?

- F-wastes (from non-specific sources, such as solvents and sludges).
- P-wastes (also known as acute hazardous wastes).
- U-wastes (discarded commercial chemical products).
- K-wastes (manufacturing process wastes from specific industries/sources).



Is it listed?

The lists are found in:

- §261.31 / F-wastes
- §261.32 / K-wastes
- §261.33(e) / P-wastes
- §261.33(f) / U-wastes



Is it listed?

ICR-only wastes

- If the waste was listed only because it is ignitable/corrosive/reactive, <u>AND</u>
- The waste no longer exhibits any characteristic, *THEN*
- The waste is not hazardous!
- There are 29 listed wastes that are ICR-only.



Is it characteristic?

The four characteristics are:

- Ignitability / D001
- Corrosivity / D002
- Reactivity / D003
- Toxicity / D004-D043



Is it characteristic?

Determine if it is characteristic waste by:

 Knowledge (Safety Data Sheets, process knowledge)

• Testing (ph, flash test, Toxicity Characteristic Leaching Procedure)



Is it characteristic?

The characteristic wastes are found at:

- Ignitability / §261.21
- Corrosivity / §261.22
- Reactivity / §261.23
- Toxicity / §261.24



Common problems

• Lack of written documentation (waste profiles)

Over-coding waste



Waste Determinations

Yes, it can be complicated!!!



I've got hazardous waste!!! Now what do I do?



The magic numbers:

- <220 lbs./month CESQG
- 220-2200 lbs./month SQG
- >2200 lbs./month LQG

- <2.2 lbs./month acute haz waste CESQG
- >2.2 lbs./month acute haz waste LQG



• CESQG's are **NOT** required to register!

• SQG and LQG must register and renew annually.



CESQG requirements:

- Have waste determinations on file.
- Send the hazardous waste to a permitted facility.
- <220 lbs./month haz waste or <2.2 lbs./month acute haz waste.
- No more than 2200 lbs. haz waste or 2.2 lbs. acute haz waste on site.



If you have to register, the forms and instructions are found at:

http://waste.ky.gov/HWB/Pages/HWBforms.aspx



• Hazardous waste generation and on-site management of hazardous waste must be consistent with registration!

• This means if you generate a new waste that isn't on your registration, then you must submit a modified registration within 30 days.



• Submit a hazardous waste annual report by March 1.

• If you are LQG, use the free EasiTrak web site, *PLEASE*? ②

• And send a copy to your county judge executive(s), pretty please?



• **SQG training** / The generator must ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures, relevant to their responsibilities during normal facility operations and emergencies.



• SQG training / At all times there must be at least one employee either on the premises or on call (i.e., available to respond to an emergency by reaching the facility within a short period of time) with the responsibility for coordinating all emergency response measures specified in paragraph (d)(5)(iv) of this section. This employee is the emergency coordinator.



• SQG training / The generator must post the following information next to the telephone: (A) The name and telephone number of the emergency coordinator; (B) Location of fire extinguishers and spill control material, and, if present, fire alarm; and (C) The telephone number of the fire department, unless the facility has a direct alarm.



LQG training

- Formal RCRA training program.
- Train staff that deal with haz waste.
- Training conducted by "qualified person."
- Train new employees within 6 months.
- Train annually.



LQG training

• Must keep employee training records!

• Employee name, job title, job description, training required.

Keep the records!



The owner or operator must maintain the following documents and records at the facility: (1) The job title for each position at the facility related to hazardous waste management, and the name of the employee filling each job; (2) A written job description for each position listed under paragraph (d)(1) of this Section. This description may be consistent in its degree of specificity with descriptions for other similar positions in the same company location or bargaining unit, but must include the requisite skill, education, or other qualifications, and duties of facility personnel assigned to each position; (3) A written description of the type and amount of both introductory and continuing training that will be given to each person filling a position listed under paragraph (d)(1) of this section; (4) Records that document that the training or job experience required under paragraphs (a), (b), and (c) of this section has been given to, and completed by, facility personnel. [401 KAR 35:020 Section 7] [40 CFR 265.16(d)]



LQG RCRA Contingency Plans

- Must be a written plan.
- Describe actions taken when haz waste or haz waste constituents are released.
- SPCC plans can be modified to include contingency plan requirements.
- Describe arrangements with local responders.



LQG RCRA Contingency Plans

- List names, addresses, and phone numbers (office and home) of all persons qualified to act as emergency coordinator.
- List of emergency equipment including location, physical description, and its capabilities.



LQG RCRA Contingency Plans

- Evacuation plan.
- Have a copy of the contingency plan available.
- Submit a copy to local police, fire departments, hospitals, emergency response teams.
- Plan must be amended as necessary.
- Emergency coordinator duties.



Emergency Arrangements

Applies to SQG and LQG facilities.

 Must attempt to familiarize police/fire/response teams/hospitals with the facility and the types of hazardous waste present.



Exports of Hazardous Waste

• Must notify EPA in writing 60 days before waste leaves the US.

• See 40 CFR 262.53(a) for all the requirements.



Manifests

- Must use EPA Form 8700-22.
- Must be signed by the generator/transporters/TSD.
- Keep for 3 years.
- Exception reports.



Land Disposal Restrictions

- Determine if the waste must be treated before land disposal.
- No dilution.
- Send a one-time written notice to each treatment or storage facility receiving the waste with the initial shipment of waste, and place a copy in the file



Waste Minimization Plans

- Required for LQG's.
- Must have six elements:
 - Top management support.
 - Characterization of waste generation and costs.
 - Periodic waste minimization assessments.
 - Cost allocation.
 - Technology transfer.
 - Program implementation and evaluation.
- http://www.dep.state.fl.us/waste/quick_topics/publications/s hw/HWRegulation/Binder1_waste_min_guide.pdf



Satellite Accumulation

- At or near point of generation.
- Under operator control.
- SAA is limited to 55 gal. *TOTAL*.
- Containers labeled "Hazardous Waste" or with other words that identify the contents of the containers.



Emergency Preparedness

 Facilities must be maintained and operated to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment.



Emergency Preparedness

• Site equipped with an internal communications or alarm system capable of providing immediate emergency instruction (voice or signal) to facility personnel.



Emergency Preparedness

• Site equipped with a device, such as a telephone (immediately available at the scene of operations) or a hand-held two (2) way radio, capable of summoning emergency assistance from local police departments, fire departments, or state or local emergency response teams.



Emergency Preparedness

- Site equipped with portable fire extinguishers, fire control equipment, spill control equipment and decontamination equipment.
- Site equipped with water at adequate volume and pressure to supply water hose streams, or foam producing equipment, or automatic sprinklers, or water spray systems.



Emergency Preparedness

• Facility communications or alarm systems, fire protection equipment, spill control equipment and decontamination equipment where required, tested and maintained as necessary to assure its proper operation in time of emergency.



Emergency Preparedness

 Whenever hazardous waste is being poured, mixed, spread, or otherwise handled, all personnel involved in the operation must have immediate access to an internal alarm or emergency communication device, either directly or through visual or voice contact with another employee, unless such a device is not required under Sec. 265.32.



Accumulation Areas

- Adequate aisle space.
- Waste packaged according to DOT regulations.
- Containers dated when they were full!!!
- Containers labeled "Hazardous Waste."
- Containers in good condition.



Accumulation Areas

- Containers must be closed (see EPA guidance).
- Containers compatible with the waste.
- No abuse of containers allowed!
- Weekly inspections.
- Ignitable/reactive wastes 50 ft. from property line, and have a "No Smoking" sign.



Accumulation Areas

- Incompatible wastes cannot be stored together!
- Must be separated from the other materials or protected from them by means of a dike, berm, wall, or other device



Accumulation Time Limits

• CESQG / No time limit.

- SQG / 180 days if TSD < 200 miles away.
- SQG / 270 days if TSD > 200 miles away.

• LQG / 90 days.



Waste Amount Limits

• CESQG / 2,200 lbs.

• SQG / 13,227 lbs.

• LQG / no limit.



There are other requirements for haz waste tanks, drip pads, containment buildings!



What is used oil?

- Must be derived from crude or synthetic oil.
- Must have been used as a lubricant, coolant, non-contact heat transfer fluid, hydraulic fluid, buoyant, or other similar purpose.
- Must be contaminated with physical or chemical impurities.



Used oil generator basics:

- Comply with SPCC requirements, if applicable.
- Manage it in containers or tanks that are in good condition.
- No leaks and clean up any spills!
- Label containers/tanks "Used Oil."
- Used oil transporter must have EPA ID number.



Burning used oil for energy recovery

- Used oil must be from on-site or from household do-it-yourselfers.
- Used oil heater must be 500,000 BTU/hour or less.
- Heater must be vented to ambient air.



Other types of used oil facilities:

- Used oil Transporter-Transfer Facility.
- Used oil Fuel Marketer.
- Used oil Processor-Re-refiner.



Hazardous waste "cheat sheets" – just ask!

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For treatment on-site activity, the facility must submit an official request to treat waste on-site pursuant to 401 KAR 32:030 Section 6, fill out a new Registration of Hazardous Waste Activity form (DEP 7037) and check the "Treatment On-Site" Box. This form can be found at:

http://waste.ky.gov/HWB/Pages/HWBforms.aspx



In Section III under Other Activities, check *Generator*Requesting Approval to Treat Hazardous Waste On-Site. Along with the completed form, include the following:

- Specify if your treatment is in order to meet land disposal restrictions (LDRs) or if the waste will be shipped off-site to a treatment, storage and disposal facility (TSDF).
 - If you treat hazardous waste to meet LDRs under the regulations (KARs) you must develop and follow a written Waste Analysis Plan (WAP) pursuant to 401 KAR 37:010 Section 2.
 - If you treat your hazardous waste to meet LDRs, you must comply with the notification and certification requirements found in 401 KAR 37:010 Section 7.
 - If you are not treating a hazardous waste to meet LDRs, make it less hazardous (without dilution prohibitions) or more easily transportable, you are not required to have a WAP.



• A detailed description of the treatment process along with any equipment manufacturer model number and specifications.

• A description of the material being treated. Include any current SDS on the material, and/or a current laboratory analysis of the material. Please note all characteristic and listed waste codes applicable to the material. Also include the maximum quantity generated and to be treated.



• The step-by-step process through which the treatment will occur. Please note that the facility may only treat waste generated at the same facility as the treatment activity. This includes standard parameters and limitations on the process.

- The current disposition for the waste and the proposed disposition after treatment.
- Any training required for employees to operate and work in the vicinity of the treatment process.



• The training required for the person(s) performing the treatment process.

• A copy of a contingency plan for employees to assess the hazards of the process and how to contend with such hazards. This can be the general contingency plan the facility has for the employees.



- The current method for the transportation for the waste material and the method to be used after obtaining approval.
- Procedures to comply with applicable requirements in 401 KAR 35:275, 35:280 and 35:281.

If this is a modification of an already approved Treatment On-Site, please also include:

- Date of approval
- Operation Parameters
- Operation Limits
- Justification for the modification



- The Registration fee shall be made payable to the Kentucky State Treasurer. See Schedule 1 of the Registration instructions to find out what your total Registration fee is. If you are unsure of what your fee is, contact Maria Wood, Edith Greer or Carla Cornett at (502) 564-6716. They may also be reached by e-mail at Maria. Wood, Edith. Greer or Carla. Cornett@ky.gov.
- The approval of such activities from this Division will not exclude the facility from obtaining the necessary permits or authorization from any other local, state, or federal agency. The facility will need to submit an application to the other governing agencies separately.



Common examples of treatment that require approval!

• On-site solvent distillation.

• Aerosol can puncturing (if can is disposed).



On-site Treatment Permitting Exemptions

- Elementary Neutralization Units for D002 wastes only.
- Totally Enclosed Treatment Facility.
- Adding absorbents to waste in a container, provided it is added when the waste is first placed in the container.



Wastewater Treatment Units

Must be subject to the Clean Water Act.

Must be a "wastewater."

• Must be a tank or tank system.

• Must be onsite.



Recycling

• Recycling is usually considered treatment and must be approved by the Hazardous Waste Branch.



Questions?

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